AMSAT News Service Weekly Bulletins
Issue: ANS-128
Date: 2022-05-08
Sources: amsat-ans-2022-ans-128-weekly-hyperkitty-7f78c60e15.txt,
amsat-ans-2022-ans-128-weekly-hyperkitty-9f858570be.txt

AMSAT NEWS SERVICE
ANS-128

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org.

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

In this edition:

* Kick-Off Hamvention with Dinner at Tickets
* AMSAT Forum Scheduled for Saturday, May 21, 2022
* IARU Coordinates Amateur Radio Payload for Chinese Space Station
* Amateur Radio and AMSAT-UK Featured at EMFcamp 2022
* Changes to AMSAT-NA TLE Distribution for May 5, 2022
* ARISS News
* Upcoming Satellite Operations
* Hamfests, Conventions, Maker Faires, and Other Events
* Satellite Shorts From All Over

ANS-128 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 May 08

Kick-Off Hamvention with Dinner at Tickets

The annual AMSAT "Dinner at Tickets" party will be held at Tickets Pub & Eatery on Thursday, May 19 from 6:00 PM to 8:00 PM EDT. There is no program or speaker - just good conversation. Everyone is invited regardless of whether or not they helped with setup or plan to work in the booth. Tickets has a great selection of Greek and American food and great company! Food can be ordered from the menu; drinks (beer, wine, sodas and iced tea) are available at the bar.
Come as you are; no reservations required. Bring some friends and have a great time the night before Hamvention. Tickets Pub & Eatery is located at 7 W. Main St, Fairborn, OH 45324. (Telephone (937) 878-9022)

[ANS thanks Phil Smith, W1EME, AMSAT Hamvention Manager for the above information.]

+=+=+=

Keep Amateur Radio in Space!
https://www.amsat.org/join-the-amsat-presidents-club/
+=+=+=

+=+=+=

K6DUE
The ISS callsign is presently scheduled to be NA1SS.
The downlink frequency is presently scheduled to be 145.800 MHz.
The scheduled crewmember is Samantha Cristoforetti, IZ0UDF.
Contact is go for Friday May 13, 2022 at 09:07:23 UTC.

+ Completed Contacts

Istituto Comprensivo 1 Chieti, Chieti, Abruzzo, Italy, direct via IZ6BMP and telebridge via IK1SLD.
The ISS callsign was IR0ISS.
The downlink frequency was 145.800 MHz.
The crewmember was Samantha Cristoforetti, IZ0UDF.
Contact was successful on Friday, April 29, 2022 at 07:49:17 UTC

The latest information on the operation mode can be found at
https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors for the above information.]

+=+=+=

Hamfests, Conventions, Maker Faires, and Other Events

AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

Hamvention
May 20-22, 2022
Greene County Fairgrounds & Expo Center
120 Fairgrounds Road
Xenia, OH 45385
https://www.hamvention.org

2022 Rocky Mountain ARRL Division Convention
Friday, October 7, 2022 to Sunday, October 9, 2022
Event Center at Archer
3921 Archer Pkwy
Cheyenne, Wyoming 82007
https://wyhamcon.org/site

[ANS thanks Paul Overn, KE0PBR, AMSAT Events page manager, for the above information.]

Satellite Shorts From All Over

+ The 2022 CubeSat Developers Workshop has come and gone but the presentations live on. You can stream these excellent presentations at https://www.cubesatdw.org/.
[ANS thanks cubesat.org for the above information.]

+ AMSAT-SM in Sweden celebrated 40 years as an organization and group on May 7, 2022. They started in the town of Oskarshamn in 1982 and have continuously worked for information about Amateur Radio in space and trying to make the interest for ham radio satellites in Sweden getting larger. The people behind AMSAT-SM today are Hakan SM7WSJ, Inge SM4JLX and Lars SM0TGU. We hope they are active for many years to come!
[ANS thanks AMSAT-SM for the above information.]

+ In a scene from Netflix TV series Yakamoz S-245, it seems that the main software used at the Incirlik Air Base in Turkey is SatPC32, Airspy, SDRSharp, MMSSTV, Orbitron and probably the AMSAT-UK Dashboard. Read the story at https://www.rtl-sdr.com/.
[ANS thanks rtl-sdr.com for the above information.]

+ Raspberry Pi and its partners at ESA Education are excited to announce that 299 teams have achieved flight status in Mission Space Lab of the 2021/22 European Astro Pi Challenge. This means that these young people’s programs are the first ever to run on the two upgraded Astro Pi units on board the International Space Station. Mission Space Lab gives teams of young people up to age 19 the opportunity to design and conduct their own scientific experiments that run on board the ISS. It’s an eight-month long activity that follows the European school year. The exciting hardware upgrades inspired a record number of young people to send us their Mission Space Lab experiment ideas. Read the full story at https://tinyurl.com/ANS-128-RaspberryPi.
[ANS thanks raspberrypi.org for the above information.]

What it's like to become a NASA astronaut? More than 18,000 Americans competed in the last round of NASA's astronaut selection. The new candidates will be announced Wednesday (June 7), and will report for basic training in August. See what it takes to be a NASA astronaut and what happens after the selection at https://tinyurl.com/ANS-128-Astronauts.
[ANS thanks space.com for the above information.]

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Frank Karnauskas, N1UW
n1uw at amsat dot org

==========
ADDITIONAL COMPONENT BULLETINS RECOVERED FROM OTHER POSTS
==========

AMSAT NEWS SERVICE
ANS-135

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

In this edition:

* AMSAT Hamvention Update
* AMSAT-UK Space Colloquium October 8-9
* Amateur Radio and AMSAT-UK at EMFcamp 2022
* Paper Published: Deep space reception of Tianwen-1 by AMSAT-DL using GNU radio
* Franklin Antonio, N6NKF, SK
* ARISS News
* Upcoming Satellite Operations
* Changes to AMSAT-NA TLE Distribution for May 12, 2022
* Hamfests, Conventions, Maker Faires, and Other Events
* Satellite Shorts From All Over

ANS-135 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 May 15

AMSAT Hamvention Update:

The Dayton Hamvention is coming next weekend! AMSAT’s presence with several events throughout the weekend and in with eight adjoining booths in Building 1. Highlighting the exhibit will be:

- CubeSat Simulator hardware and software demonstrations

- SatPC software demonstrations
- AMSAT Engineering staff question and answer table
- AMSAT Youth Initiative (KidzSat) introduction
- OSCAR ground station for live satellite operations
- Annual Membership sign-up and renewals
- AMSAT President's Club recognition
- AMSAT Board of Directors and Senior Officers Meet and Greet
- AMSAT Store offering AMSAT trinkets, books and Arrow Antennas

The interaction with AMSAT members, satellite operators, designers, and builders makes the whole experience a lot of fun. Meet or renew acquaintances, exchange operating tips, and find out what antennas, software and equipment other AMSAT members use. We currently expect the AMSAT senior officers and board members to be there too.

If you've never operated a satellite before, but want to learn more, this is the place.

Kick-Off Hamvention with Dinner at Tickets
The annual AMSAT "Dinner at Tickets" party will be held at Tickets Pub & Eatery on Thursday, May 19 from 6:00 PM to 8:00 PM EDT. There is no program or speaker - just good conversation. Everyone is invited regardless of whether or not they helped with setup or plan to work in the booth. Tickets has a great selection of Greek and American food and great company! Food can be ordered from the menu; drinks (beer, wine, sodas and iced tea) are available at the bar. Come as you are; no reservations required. Bring some friends and have a great time the night before Hamvention. Tickets Pub & Eatery is located at 7 W. Main St, Fairborn, OH 45324. (Telephone (937) 878-9022)

AMSAT/TAPR Banquet will honor the life of Bob Bruninga, WB4APR
The 13th annual AMSAT/TAPR Banquet will be held at the Kohler Presidential Banquet Center on Friday, May 20th at 18:30 EDT. This dinner is always a highlight of the AMSAT (Radio Amateur Satellite Corp.) and TAPR (Tucson Amateur Packet Radio) activities during the Dayton Hamvention. This year's banquet will honor the life and accomplishments of long time amateur satellite and amateur packet pioneer Bob Bruninga, WB4APR, who passed away in February.

The Kohler Presidential Banquet Center is located at 4548 Presidential Way, Kettering, Ohio. That is about 20 minutes away from the Greene County Fairgrounds.

Tickets ($57 each) purchase deadline was Friday, May 13th. Banquet tickets had to be purchased in advance and will not be sold at the AMSAT booth. There will be no tickets to pick up at the AMSAT booth. Tickets purchased on-line will be maintained on a list with check-in at the door at the banquet center. Seating is limited to the number of meals reserved with the Kohler caterers based on the number of tickets sold by the deadline.

AMSAT Forum Scheduled for Saturday, May 21, 2022
The AMSAT Forum will be in Room #2 on Saturday May 21, 2022 from 12:10 PM to 1:40 PM EDT. The forum may be live streamed on the DARA website at https://hamvention.org/media-news/live-streaming/
- 2022 AMSAT Status Report: Robert Bankston KE4AL, AMSAT President, will highlight recent activities within AMSAT and discuss some of our challenges, accomplishments, projects, and any late breaking news.
- AMSAT Engineering Program: Jerry Buxton, N0JY, AMSAT Vice President - Engineering, will talk about current and upcoming satellite missions.
- AMSAT Education: Alan Johnston, KU2Y, AMSAT Vice President - Education Relations will talk about the AMSAT CubeSat Simulator.
- AMSAT Development: Frank Karnauskas, N1UW, AMSAT Vice President - Development, will report on AMSAT Youth Initiative and its features.
So, arrive early, grab a seat, take in some air conditioning and catch up on the latest AMSAT happenings!

[ANS thanks Phil Smith, W1EME, AMSAT Hamvention Exhibit organizer, AMSAT News & TAPR for the above information]

+=+=+=

Keep Amateur Radio in Space!
https://www.amsat.org/join-the-amsat-presidents-club/
+=+=+=

AMSAT, a portion of the proceeds goes towards
Keeping Amateur Radio in Space.
https://amsat.org/product-category/hardware/

+=+=+=

25% of the purchase price of each product goes
towards Keeping Amateur Radio in Space
https://www.zazzle.com/amsat_gear

+=+=+=

+ N8MR: EN 57,67,56 8/6 through 8/13. More to come as date gets closer.

ISS Status:
+ ISS Status as of May 12, 2022
Columbus Module radios:
IORS (Kenwood D710GA) – STATUS – Configured. Current mode set to cross band repeater (145.990 MHz up {PL 67} & 437.800 MHz down).
Radio to be powered OFF to support Progress 79 undocking on June 01.
Capable of supporting USOS scheduled voice contacts, packet and voice repeater ops.

Service Module radios:
Kenwood D710E – STATUS – Radio usually off.
Radio to be powered OFF to support Progress 79 undocking on June 01.
Capable of supporting ROS scheduled voice contacts and SSTV.
Kenwood D710GA for SM delivered on 80P. Installation TBD in early part of Increment 67. Planned to support packet operation (145.825 MHz up & down).

[ANS thanks Paul Overn, KE0PBR, AMSAT rover page manager for the above information]

Changes to AMSAT-NA TLE Distribution for May 12, 2022

The following satellite has decayed from orbit and has been removed from this week's AMSAT-NA TLE distribution:
TAUSAT-1 NORAD Cat ID 47926 (decayed form orbit on 5/3/2022 per Space-Track).

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager, for the above information]

Hamfests, Conventions, Maker Faires, and Other Events

AMSAT Ambassadors provide presentations, demonstrate communicating through amateur satellites, and host information tables at club meetings, hamfests, conventions, maker faires, and other events.

AMSAT Ambassador Schedules

Clint Bradford, K6CLS: Upcoming “How to Work the “Easy” Satellites” talks are scheduled:

Orange County ARA CA - May 20
Cal Poly Pomona - TBD
WARA - Orange County CA - June 11

Notes: "And it “feels” like lives are improving here in So California, as that meeting for WARA in June will be (hopefully) an IN-PERSON show! (Have to tune up my projector and dust off the DaLite projection screen!)
Think a 90-minute lively, informative, and fun “How to Work the Easy Satellites” Zoom presentation would be appropriate for your convention or club? Always included are overviews of the ARRL, AMSAT, and ARISS. And pre-presentation questions are solicited and welcome."

Send an email or call!
Clint Bradford K6LCS
AMSAT Ambassador; ARRL Affiliated Club Coordinator, instructor
http://www.work-sat.com
909-999-SATS (7287)

Jack Spitznagel, KD4IZ: SDR applications - Ways to use the RF “Swiss Army Knife” An intro to the AMSAT Fox-In-A-Box Image
Scheduled (tentatively live) July 18, 2022 the Frederick Amateur Radio Club, Frederick, MD
For information on this presentation and availability, contact Jack Spitznagel, KD4IZ (kd4iz at arrl dot org)

Scheduled Events with AMSAT involvement:

Hamfests and Conventions

+ Hamvention 2022
  May 20, 2022 to May 22, 2022
  Greene County Fairgrounds and Expo Center
  210 Fairground Road
  Xenia, Ohio 45385
  https://www.hamvention.org

+ 2022 Rocky Mountain ARRL Division Convention
  October 7, 2022 - October 9, 2022
  Event Center at Archer
  3921 Archer Pkwy
  Cheyenne, Wyoming 82007
  https://wyhamcon.org/site.

[ANS thanks Paul Overn, KE0PBR, AMSAT Events Page Manager, for the above information]

Satellite Shorts From All Over

+ Meet some of the oldest "undead" spacecraft that are still going strong. Not all the dead stuff in space is junk; some are true gems. Believe it or not, according to the Index of Objects Launched into Outer Space maintained by the United Nations Office for Outer Space Affairs, there were 7,389 individual satellites orbiting our little planet at the end of April 2021 (others place the number closer to 6,500). This number is only set to increase over time, with some estimates coming in at around 990 satellites being added to the mix every single year. More on this interesting read at https://bit.ly/3FEDNkm [ANS thanks Christopher McFadden and Interesting Engineering for the above information]

+ 18-year-old exploring the depths of space with radio: Interesting Engineering have published an article about 18-year-old radio amateur Dhruv Rebba KC9ZJX who hopes to develop a program that will enable youth to build and program microsatellites. When Rebba was nine, he received his ham radio technician license - becoming the youngest person of Indian origin, until then, to receive the same. That earned him a spot in the Limca Book of Records. The same year, he attained the General Class License. Now a senior specializing in Computer Science at Normal Community High School in Bloomington, Rebba firmly believes that getting into amateur radio was a stepping stone to various other fields. More information at https://bit.ly/3PePQcB [ANS thanks Southgate Amateur Radio News for the above information]

+ Tianzhou-4. China successfully launched Tianzhou-4 on a Long March 7 to resupply the Tiangong space station (which is increasingly being referred to as the CSS) ahead of the crewed Shenzhou-14 next month (NET June 5). Tianzhou automated resupply spacecraft are built on a core module design derived from the Tiangong station itself. At 4.2 m in diameter and 18 m long, they can deliver up to 6.8 tons of cargo to the station and are also used to refuel the station’s electric propulsion system. Shenzhou-14’s crew will prepare the station for its second and third modules: Wentian and Mengtian. These modules are on-orbit labs hosting Chinese and international experiments—over 1,000(!) have already been approved. More at https://bit.ly/3PkTQbx [ANS thanks The Orbital Index for the above information

+ Weird News in Space: Not to be outdone by Oxford University’s analysis of a planet made out of blueberries (cf. Issue 158), University of Sussex researchers have published a detailed paper answering the critical related question: could a planetoid consisting entirely of cows support a methane atmosphere? Yes, but at 1019 incompressible cows, “the cost, necessary rearing area, and required nutrition are impossible to meet at the current time.” Astrobites followed up with a critical analysis of this paper and other recent cow-culations. Links may be found in the news bite at bottom of page: https://bit.ly/3PkTQbx [ANS thanks The Orbital Index for the above information]

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor, Jack Spitznagel, KD4IZ
kd4iz at arrl dot org